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Table of Contents

Note : Remove “Table of Content” before including in CP Book
Each Course Plan shall be printed and made into a book with cover page
Blooms Level in all sections match with A.2, only if you plan to teach / learn at higher levels

15CS71 : Web Technology and Its Application

A. COURSE INFORMATION

1. Course Overview

Degree:	BE	Program:	IS
Year / Semester :	7	Academic Year:	2018-19
Course Title:	Web Technology and Its Application	Course Code:	15CS71
Credit / L-T-P:	4/ 4-0-0	SEE Duration:	180 Minutes
Total Contact Hours:	50	SEE Marks:	80 Marks
CIA Marks:	20	Assignment	5 / Module
Course Plan Author:	Dhananjaya v	Sign	Dt:
Checked By:		Sign	Dt:

2. Course Content

Module	Module Content	Teaching Hours	Module Concepts	Blooms Level
1	Introduction to HTML, What is HTML and Where did it come from?, HTML Syntax, Semantic Markup, Structure of HTML Documents, Quick Tour of HTML Elements, HTML5 Semantic Structure Elements, Introduction to CSS, What is CSS, CSS Syntax, Location of Styles, Selectors, The Cascade: How Styles Interact, The Box Model, CSS Text Styling.	10	HTML DOCUMENTS , CSS DOCUMENTS	L3
2	HTML Tables and Forms, Introducing Tables, Styling Tables, Introducing Forms, Form Control Elements, Table and Form Accessibility, Microformats, Advanced CSS: Layout, Normal Flow, Positioning Elements, Floating Elements, Constructing Multicolumn Layouts, Approaches to CSS Layout, ResponsiveDesign, CSS Frameworks.	10	develop HTML Forms	L3
3	JavaScript: Client-Side Scripting, What is JavaScript and What can it do?, JavaScript Design Principles, Where does JavaScript Go?, Syntax, JavaScriptObjects, The Document Object Model (DOM), JavaScript Events, Forms, Introduction to Server-Side Development with PHP, What is Server-SideDevelopment, A Web Server's Responsibilities, Quick Tour of PHP, ProgramControl, Functions	10	Client-Side Scripting, Server-Side Scripting	L3
4	PHP Arrays and Superglobals, Arrays, $_GET and $_POST Superglobal Arrays, $_SERVER Array, $_Files Array, Reading/ Writing Files, PHP Classes and Objects, Object-Oriented Overview, Classes and Objects in PHP, Object Oriented Design, Error Handling and Validation, What are Errors andExceptions?, PHP Error Reporting, PHP Error and Exception Handling	10	PHP Arrays php Exception	L3
5	Managing State, The Problem of State in Web Applications, Passing Information via Query Strings, Passing Information via the URL Path, Cookies, Serialization,Session State, HTML5 Web Storage, Caching, Advanced JavaScript and jQuery,JavaScript Pseudo-Classes, jQuery Foundations, AJAX, Asynchronous FileTransmission, Animation, Backbone MVC Frameworks, XML Processing and Web Services, XML Processing, JSON, Overview of Web Services.	10	Memory management, Pseudo-Classes	L2

3. Course Material

Module	Details	Available
1	Text books	

	Randy Connolly, Ricardo Hoar, "Fundamentals of Web Development", 1 st Edition,Pearson Education India. (ISBN:978-9332575271)	In Lib
2	Reference books	
	1)Robin Nixon, "Learning PHP, MySQL &JavaScript with jQuery, CSS and HTML5", 4 th Edition, O'Reilly Publications, 2015. (ISBN:978-9352130153) 2) Luke Welling, Laura Thomson, "PHP and MySQL Web Development", 5 th Edition,Pearson Education, 2016. (ISBN:978-9332582736) 3) Nicholas C Zakas, "Professional JavaScript for Web Developers", 3 rd Edition,Wrox/Wiley India, 2012. (ISBN:978-8126535088)	In Lib
3	Others (Web, Video, Simulation, Notes etc.)	
		Not Available

4. Course Prerequisites

SNo	Course Code	Course Name	Module / Topic / Description	Sem	Remarks	Blooms Level
						L3
				-	Plan Gap Course	

Note: If prerequisites are not taught earlier, GAP in curriculum needs to be addressed. Include in Remarks and implement in B.5.

B. OBE PARAMETERS

1. Course Outcomes

#	COs	Teach. Hours	Concept	Instr Method	Assessment Method	Blooms' Level
15CS71 CO1	Apply HTML syntax and semantics to build web page	05	HTML DOCUMENTS	Lecture / PPT	Slip Test	L3 Apply
CO2	Illustrate CSS syntax and semantics to build web page	05	CSS DOCUMENTS	Lecture / PPT	Assignment	L3 Apply
CO3	Design HTML forms to build web page	05	develop HTML Forms	Lecture / PPT	Assignment and Slip Test	L3 Apply
CO4	Demonstrate CSS layout to build web page	05	develop CSS Forms	Lecture / PPT	Assignment	L3 Apply
CO5	Develop a client – side javascript scripting to build web page	05	Client-Side Scripting	Lecture	Slip test	L3 Apply
CO6	Demonstrate server – side script using PHP to generate and dilsplay the content dynamically.	05	Server-Side Scripting	Lecture and Tutorial	Assignment	L3 Apply
CO7	Apply object oriented concepts in PHP to build web page	05	PHP Arrays	Lecture	Assignment and Slip Test	L3 Apply
CO8	Show different Exception and error handling methods in order to validate	05	php Exception	Lecture	Assignment	L3 Apply

	web page					
CO9	Report small memory management using cookies and URL in web application	05	Memory management	Lecture	Assignment	L2 Understanding
CO10	Explain the concept of AJAX and Jquery for web services	05	Pseudo-Classes	Lecture and Tutorial	Assignment	L2 Understanding
-	**Total**	**50**	-	-	-	-

Note: Identify a max of 2 Concepts per Module. Write 1 CO per concept.

2. Course Applications

SNo	Application Area	CO	Level
1	Demonstrate various HTML Documents with examples	CO1	L3
2	Demonstrate various CSS Selector forms with examples	CO2	L3
3	Develop HTML Documents to build web page using forms	CO3	L3
4	Apply CSS layouts to build web page using forms	CO4	L3
5	Demonstrate a client – side JavaScript scripting to build web page	CO5	L3
6	Illustrate server – side script using PHP to generate and display the content dynamically.	CO6	L3
7	Develop object oriented concepts in PHP to build web page	CO7	L3
8	Illustrate different Exception and error handling methods in order to validate web page Report small memory management using cookies and URL in web application	CO8	L3
9	Report small memory management using cookies and URL in web application	CO9	L2
10	Explain the concept of AJAX and Jquery for web services	CO10	L2

Note: Write 1 or 2 applications per CO.

3. Articulation Matrix

(CO – PO MAPPING)

-	Course Outcomes	Program Outcomes												
#	COs	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO8	PO 9	PO 10	PO 11	PO 12	Level
15CS71.1	Apply HTML syntax and semantics to build web page	3					1	1	1	1	1		1	L3
15CS71.2	Illustrate CSS syntax and semantics to build web page	3					1	1	1	1	1		1	L3
15CS71.3	Design HTML forms to build web page	3					1	1	1	1	1		1	L3
15CS71.4	Demonstrate CSS layout to build web page	3					1	1	1	1	1		1	L3
15CS71.5	Develop a client – side javascript scripting to build web pag	3					1	1	1	1	1		1	L3
15CS71.6	Demonstrate server – side script using PHP to generate and dilsplay the content dynamically.	3					1	1	1	1	1		1	L3
15CS71.7	Apply object oriented concepts in PHP to build web page	3					1	1	1	1	1		1	L3
15CS71.8	Show different Exception and error handling methods in order to validate web page	3					1	1	1	1	1		1	L3
15CS71.9	Report small memory management using cookies and URL in web application	3					1	1	1	1	1		1	L3
15CS71.10	Explain the concept of AJAX and Jquery for web services	**3**					**1**	**1**	**1**	**1**	**1**		**1**	**L3**

Note: Mention the mapping strength as 1, 2, or 3

4. Mapping Justification

Mapping		Justification	Mapping Level
CO	**PO**	**-**	**-**
CO1	PO1	Knowledge is required to understand HTML tags to build web pages	L3
CO1	PO6	Applying the contextual knowledge to the society to build website	L3
CO1	PO7	Have to understand the impact of HTML for sustainability of web site	L3
CO1	PO8	Ethical responsibility is required to build web site	L3
CO1	PO9	Individual as well as team work required to build web page.	L3
CO1	PO10	Communication is required with in a team to build web page .	L3
CO1	PO12	Life long learning required to maintain web sites .	L3
CO2	PO1	Knowledge is required to understand HTML tags to build web pages	L3
CO2	PO6	Applying the contextual knowledge to the society to build website	L3
CO2	PO7	Have to understand the impact of HTML for sustainability of web site	L3
CO2	PO8	Ethical responsibility is required to build web site	L3
CO2	PO9	Individual as well as team work required to build web page.	L3
CO2	PO10	Communication is required with in a team to build web page .	L3
CO2	PO12	Life long learning required to maintain web sites .	L3
CO3	PO1	Knowledge is required to understand HTML tags to build web pages	L3
CO3	PO6	Applying the contextual knowledge to the society to build website	L3
CO3	PO7	Have to understand the impact of HTML for sustainability of web site	L3
CO3	PO8	Ethical responsibility is required to build web site	L3
CO3	PO9	Individual as well as team work required to build web page.	L3
CO3	PO10	Communication is required with in a team to build web page .	L3
CO3	PO12	Life long learning required to maintain web sites .	L3
CO4	PO1	Knowledge is required to understand HTML tags to build web pages	L3
CO4	PO6	Applying the contextual knowledge to the society to build website	L3
CO4	PO7	Have to understand the impact of HTML for sustainability of web site	L3
CO4	PO8	Ethical responsibility is required to build web site	L3
CO4	PO9	Individual as well as team work required to build web page.	L3
CO4	PO10	Communication is required with in a team to build web page .	L3
CO4	PO12	Life long learning required to maintain web sites .	L3
CO5	PO1	Knowledge is required to understand HTML tags to build web pages	L3
CO5	PO6	Applying the contextual knowledge to the society to build website	L3
CO5	PO7	Have to understand the impact of HTML for sustainability of web site	L3
CO5	PO8	Ethical responsibility is required to build web site	L3
CO5	PO9	Individual as well as team work required to build web page.	L3
CO5	PO10	Communication is required with in a team to build web page .	L3
CO5	PO12	Life long learning required to maintain web sites .	L3
CO6	PO1	Knowledge is required to understand HTML tags to build web pages	L3
CO6	PO3	No design development required . No mapping	L3

CO6	PO6	Applying the contextual knowledge to the society to build website	L3
CO6	PO7	Have to understand the impact of HTML for sustainability of web site	L3
CO6	PO8	Ethical responsibility is required to build web site	L3
CO6	PO9	Individual as well as team work required to build web page.	L3
CO6	PO10	Communication is required with in a team to build web page .	L3
CO6	PO12	Life long learning required to maintain web sites .	L3
CO7	PO1	Knowledge is required to understand HTML tags to build web pages	L3
CO7	PO6	Applying the contextual knowledge to the society to build website	L3
CO7	PO7	Have to understand the impact of HTML for sustainability of web site	L3
CO7	PO8	Ethical responsibility is required to build web site	L3
CO7	PO9	Individual as well as team work required to build web page.	L3
CO7	PO10	Communication is required with in a team to build web page .	L3
CO7	PO12	Life long learning required to maintain web sites .	L3
CO8	PO1	Knowledge is required to understand HTML tags to build web pages	L3
CO8	PO6	Applying the contextual knowledge to the society to build website	L3
CO8	PO7	Have to understand the impact of HTML for sustainability of web site	L3
CO8	PO8	Ethical responsibility is required to build web site	L3
CO8	PO9	Individual as well as team work required to build web page.	L3
CO8	PO10	Communication is required with in a team to build web page .	L3
CO8	PO12	Life long learning required to maintain web sites .	L3
CO9	PO1	Knowledge is required to understand HTML tags to build web pages	L3
CO9	PO6	Applying the contextual knowledge to the society to build website	L3
CO9	PO7	Have to understand the impact of HTML for sustainability of web site	L3
CO9	PO8	Ethical responsibility is required to build web site	L3
CO9	PO9	Individual as well as team work required to build web page.	L3
CO9	PO10	Communication is required with in a team to build web page .	L3
CO9	PO12	Life long learning required to maintain web sites .	L3
CO10	PO1	Knowledge is required to understand HTML tags to build web pages	L2
CO10	PO6	Applying the contextual knowledge to the society to build website	L2
CO10	PO7	Have to understand the impact of HTML for sustainability of web site	L2
CO10	PO8	Ethical responsibility is required to build web site	L2
CO10	PO9	Individual as well as team work required to build web page.	L2
CO10	PO10	Communication is required with in a team to build web page .	L2
CO10	PO12	Life long learning required to maintain web sites .	L2
			L2

Note: Write justification for each CO-PO mapping.

5. Curricular Gap and Content

SNo	Gap Topic	Actions Planned	Schedule Planned	Resources Person	PO Mapping
1	Browser to server essential communication establishment	19-08-2018	19-08-2018	self	L3
2					
3					

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4					
5					

Note: Write Gap topics from A.4 and add others also.

6. Content Beyond Syllabus

SNo	Gap Topic	Actions Planned	Schedule Planned	Resources Person	PO Mapping
1	Web browser	19-08-2018	19-08-2018	self	L3
2	Web Server	19-08-2018	19-08-2018	self	L3
3					
4					
5					
6					
7					
8					
9					
10					

Note: Anything not covered above is included here.

C. COURSE ASSESSMENT

1. Course Coverage

Module #	Title	Teaching Hours	No. of question in Exam						CO	Levels
			CIA-1	CIA-2	CIA-3	Asg	Extra Asg	SEE		
1	HTML and CSS	10	2	-	-	1	1	2	CO1, CO2	L3
2	HTML Tables and Forms and CSS Layout	10	2	-	-	1	1	2	CO3, CO4	L3
3	Client-Side & Sever Scripting	10	-	2	-	1	1	2	CO5, CO6	L3
4	PHP Arrays and exception Handling.	10	-	2	-	1	1	2	CO7, Co8	L3
5	Managing State and Advanced	10	-	-	4	1	1	2	CO9, CO10	L2
-	**Total**	**50**	**4**	**4**	**4**	**5**	**5**	**10**	**-**	**-**

Note: Distinct assignment for each student. 1 Assignment per chapter per student. 1 seminar per test per student.

2. Continuous Internal Assessment (CIA)

Evaluation	Weightage in Marks	CO	Levels
CIA Exam – 1	30	CO1, CO2, CO3, CO4	L3
CIA Exam – 2	30	CO5, CO6, CO7, Co8	L3
CIA Exam – 3	30	CO9, CO10	L2
Assignment - 1	05	CO1, CO2, CO3, CO4	L3
Assignment - 2	05	CO5, CO6, CO7, CO8	L3
Assignment - 3			

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Seminar - 1			
Seminar - 2			
Seminar - 3	05	CO9, CO10	L2
Other Activities – define – Slip test		CO1 to Co9	L2, L3
Final CIA Marks	**40**	**-**	**-**

Note : Blooms Level in last column shall match with A.2 above.

D1. TEACHING PLAN - 1

Module - 1

Title:	HTML and CSS	Appr Time:	16 Hrs
a	***Course Outcomes***	-	**Blooms**
-	The student should be able to:	-	**Level**
1	Apply HTML syntax and semantics to build web page	CO1	L3
2	Illustrate CSS syntax and semantics to build web page	CO2	L3
b	***Course Schedule***	-	-
Class No	**Module Content Covered**	**CO**	**Level**
1	Introduction to HTML, What is HTML and Where did it come from?	C01	L3
2	HTML Syntax	C01	L3
3	Semantic Markup	C01	L3
4	Structure of HTML Documents	C01	L3
5	Quick tour to HTML Elements	C01	L3
6	HTML5 Semantic Structure Elements	C01	L3
7	Introduction to CSS, What is CSS	C02	L3
8	CSS Syntax, Location of Styles,	C02	L3
9	How Styles Interact,	C02	L3
10	The Cascade: The Box Model, CSS Text Styling.	C02	L3
c	**Application Areas**	**CO**	**Level**
1	Demonstrate various HTML Documents with examples	CO1	L3
2	Demonstrate various CSS Selector forms with examples	CO2	L3
d	**Review Questions**	-	-
1	Explain the concept of domain name conversion with figure and suitable example .	CO1	L3
2	Give syntax and an example for each of the following tags. i) <pre> ii)<p> iii)<sup> iv) <sub> v) <blockquote> vi) <img>	CO1	L3
3	Give and explain response and request phases of hypertext transfer protocol.	CO1	L3
4	Develop a complete XHTML document with proper headings, a table with four rows and three columns, a form with two labels, two textbox three checkbox, three radio buttons, a submit and a reset button. (Assume suitable content for the web page)	CO1	L3
5	Explain various selector forms with an example.	CO2	L3
6	Explain with an example the concept of framesets and frames in building web pages .	CO2	L3
7	Explain the different levels of style sheets are available in CSS.	CO2	L3
8	Explain the difference between XHTML and HTML.	CO2	L3
9	Explain alignment of text with all properties.	CO2	L3
10	Create an XHTML document that includes atleast two images and enough	CO2	L3

	text to precede the images, flow around them (one on left and one on right) and continue after the last image (Note : Use CSS tags).		
e	**Experiences**	-	-
1		CO1	L2
2			
3			
4		CO3	L3
5			

Module – 2

Title:	HTML Tables and Forms and CSS Layout	Appr Time:	10 Hrs
a	***Course Outcomes***	-	**Blooms**
-	The student should be able to:	-	**Level**
1	Design HTML forms to build web page.	CO3	L3
2	Demonstrate CSS layout to build web page.	CO4	L3
b	***Course Schedule***	-	-
Class No	**Module Content Covered**	**CO**	**Level**
11	HTML Tables and Forms, Introducing Tables	CO3	L3
12	Styling Tables	CO3	L3
13	Introducing Forms	CO3	L3
14	Form Control Elements	CO3	L3
15	Table and Form Accessibility, Microformats	CO3	L3
16	Advanced CSS: Layout	CO4	L3
17	Normal Flow, Positioning Elements	CO4	L3
18	Floating Elements, Constructing Multicolumn Layouts	CO4	L3
19	Approaches to CSS Layout	CO4	L3
20	Responsive Design, CSS Frameworks.	CO4	L3
c	**Application Areas**	**CO**	**Level**
1	Develop HTML Documents to build web page using forms	CO3	L3
2	Apply CSS layouts to build web page using forms	CO4	L4
d	**Review Questions**	-	-
11	Explain alignment of text with all properties.	CO3	L3
12	Explain the different primitives in JavaScript with examples.	CO3	L3
13	Write a JavaScript to generate a list of first 4 Fibonacci number.	CO3	L3
14	Explain the two ways an array object can be created.	CO3	L3
15	Explain the array methods with suitable examples.	CO4	L3
16	With an example, explain JavaScript screen output and keyboard input methods.	CO4	L3
17	Describe briefly the major differences between Java and JavaScript's.	CO4	L3
18	**Explain the control expressions with examples.**	CO4	L3
e	**Experiences**	-	-
1		CO1	L2
2			
3			
4		CO3	L3
5			

E1. CIA EXAM – 1

a. Model Question Paper - 1

Crs Code:	15CS71	Sem:	7	Marks:	30	Time:	75 minutes		
Course	Web Technology and Its Application								
-	**-**	**Note: Answer any 3 questions, each carry equal marks.**					**Marks**	**CO**	**Level**
1	a	Explain the concept of domain name conversion with figure and suitable example .					4	CO1	L1
	b	Give syntax and an example for each of the following tags. i) <pre> ii)<p> iii)<sup> iv) <sub> v) <blockquote> vi) <img>					4	CO1	L2
	c	Give and explain response and request phases of hypertext transfer protocol.					4	CO2	L3
	d	Develop a complete XHTML document with proper headings, a table with four rows and three columns, a form with two labels, two textbox three checkbox, three radio buttons, a submit and a reset button. (Assume suitable content for the web page)					4	CO2	L3
2	a	Explain various selector forms with an example.					4	CO1	L2
	b	Explain with an example the concept of framesets and frames in building web pages .					4	CO1	L4
	c	Explain the different levels of style sheets are available in CSS.					4	CO2	L3
	d	Explain the difference between XHTML and HTML.					4	CO2	L2
3	a	Explain alignment of text with all properties.					4	CO3	L1
	b	Explain the different primitives in JavaScript with examples.					4	CO4	L2
	c	Write a JavaScript to generate a list of first 4 Fibonacci number.					4	CO3	L1
	d	Explain the two ways an array object can be created.					4	CO4	L2
4	a	With an example, explain JavaScript screen output and keyboard input methods.					4	CO3	L2
	b	Describe briefly the major differences between Java and JavaScript's.					4	CO4	L2
	c	Explain the control expressions with examples.					4	CO3	L1
	d	Explain the array methods with suitable examples.					4	CO4	L3

b. Assignment -1

Note: A distinct assignment to be assigned to each student.

Model Assignment Questions							
Crs Code:	15CS71	Sem:	7	Marks:	5 / 10	Time:	90 – 120 minutes
Course:	Web Technology and Its Application						
Note: Each student to answer 2-3 assignments. Each assignment carries equal mark.							

SNo	USN	Assignment Description	Marks	CO	Level
1		Explain HTTP.	5	CO1	L3
2		Explain Web servers operation and general server characteristics	5	CO1	L3
3		Explain any two web programmer's tools used in web programming	5	CO1	L3
4		What tag and attibute are used to define a link? Discuss ab out it.	5	CO1	L3
5		Briefly explain why should one use XHTML over HTML.	5	CO1	L3
6		What is MIME? Explain his type specifications.	5	CO1	L3
7		Explain the standard XHTML document structure.	5	CO1	L3

8		Explain the concept of domain name conversion, with figure and a suitable example.	5	CO1	L3
9		Explain the following tags with syntax and an example for each: i) <p> ii) <pre> iii) <sup> iv) <sub> v) <blockquote>	5	CO1	L3
10		What tag and attribute are used to define a link? Discuss about it.	5	CO1	L3
11		Explain all controls that are created with the <input> tag with examples, which are used for text collection.	5	CO1	L3
12		Explain the XHTML tags used for lists in documents.	5	CO1	L3
13		What is the purpose of external level style sheet? Compare it with the other two levels.Write the format of external level style sheet.	5	CO2	L3
14		Explain all selector forms.	5	CO2	L3
15		Explain and tags	5	CO2	L3
16		Explain following tags, with example: i) Select ii)Frame iii)Textarea iv) Div.	5	CO2	L3
17		Write a XHTML program to create a table with two levels of column label: an overall label, meals and three secondary labels, breakfast, lunch and dinner. There must be two levels of row labels: an overall label, foods and four secondary labels, bread, main course, vegetable and dessert. The cells of the table must contain a number of grams for each category of the food.	5	CO2	L3
18		How lists are handled in XHTML? Design an XHTML code for illustrating nested lists.	5	CO2	L3
19		Explain the following, with respect to table creation in XHTML documents. i) <table> ii)tr, th and td attributes iii)rowspan and colspan attributes iv) text decoration v) and .	5	CO2	L3
20		Explain conflict Resolution.	5	CO2	L3
21		Write an XHTML document to describe an ordered list of four states. Each element of the list must have an unordered list of at least two cities in the state.	5	CO2	L3
22		Write a XHTML program to create nested ordered lists of cars. The Outer List must have three entries: compact, midsize, and sports. Inside each of these three lists there must be two sublists of body styles.	5	CO2	L3
23		Design an XHTML code for constructing a sample class timetable to illustrate table handling.	5	CO2	L3
24		Explain any two web programmer's tools used in web programming.	5	CO2	L3

D2. TEACHING PLAN - 2

Module – 3

Title:	Client-Side & Sever Scripting	Appr Time:	16 Hrs
a	***Course Outcomes***	-	**Blooms**
-	The student should be able to:	-	**Level**
1	Develop a client – side javascript scripting to build web page	CO5	L2
2	Demonstrate server – side script using PHP to generate and dilsplay the content dynamically.	CO6	L3
b	***Course Schedule***		
Class No	**Module Content Covered**	**CO**	**Level**
1	JavaScript: Client-Side Scripting	CO5	L3

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2	What is JavaScript and What can it do?	CO5	L3
3	JavaScript Design Principles, Where does JavaScript Go?,	CO5	L3
4	Syntax, JavaScript Objects,	CO5	L3
5	The Document Object Model (DOM)	CO5	L3
6	JavaScript Events, Forms	CO5	L3
7	Introduction to Server-Side Development with PHP	CO6	L3
8	What is Server-Side Development	CO6	L3
9	A Web Server's Responsibilities,	CO6	L3
10	Quick Tour of PHP, Program Control , Functions	CO6	L3
c	**Application Areas**	**CO**	**Level**
1	Demonstrate a client – side javascript scripting to build web page	CO5	L3
2	Illustrate server – side script using PHP to generate and display the content dynamically.	CO6	L3
d	**Review Questions**	-	-
1	What is an applet ?	CO5	L3
2	Discuss the advantages and disadvantages of client side scripting.	CO5	L3
3	How is a browser plug-in different from a browser extension.	CO5	L3
4	Identify and briefly describe at least four different server-side development technologies.	CO5	L3
5	Describe the difference between the multi-threaded and multi-process setup of PHP in Apache.	CO6	L3
6	What are server side include files? Why are they important in PHP ?	CO6	L3
7	How does PHP allow variable names to be specified at run-time? Explain with an example.	CO6	L3
8	How are parameters passed by reference different than those passed by value?	CO6	L3
9	What is the use of functions in JavaScript.?	CO6	L3
10	When should one use try catch blocks?	CO6	L3
e	**Experiences**	-	-
1		CO1	L2
2			
3			
4		CO3	L3
5			

Module – 4

Title:	PHP Arrays and exception Handling.	Appr Time:	16 Hrs
a	***Course Outcomes***	-	**Blooms**
-	The student should be able to:	-	**Level**
1	Apply object oriented concepts in PHP to build web page	CO7	L3
2	Show different Exception and error handling methods in order to validate web page	CO8	L3
b	***Course Schedule***		
Class No	**Module Content Covered**	**CO**	**Level**
1	PHP Arrays and Super globals	CO7	L3
2	Arrays, $_GET and $_POST Super global Arrays,	CO7	L3
3	$_SERVER Array, $_Files Array	CO7	L3
4	Reading/Writing Files, PHP Classes and Objects	CO7	L3

5	Object-Oriented Overview, Classes and Objects in PHP	CO7	L3
6	Object Oriented Design	CO7	L3
7	Error Handling and Validation	CO8	L3
8	What are Errors and Exceptions?	CO8	L3
9	PHP Error Reporting	CO8	L3
10	PHP Error and Exception Handling	CO8	L3
c	**Application Areas**	**CO**	**Level**
1	Develop object oriented concepts in PHP to build web page	CO7	L3
2	Illustrate different Exception and error handling methods in order to validate web page Report small memory management using cookies and URL in web application.	CO8	L3
d	**Review Questions**	-	-
1	In LAMP stack, what software is responsible for responding to HTTP requests?	CO7	L3
2	Can Apache support the multi-thread mode? Why is thread advantageous?	CO7	L3
3	How are parameters passed by reference different than those passed by values?	CO7	L3
4	Describe the ASP.NET Framework.	CO7	L3
5	What is the use of functions in JavaScript?		
6	What is embedded JavaScript used? What is the disadvantages of using embedded JavaScript.	CO8	L3
7	How does one access a particular HTML tag through JavaScript.?	CO8	L3
8	Name some common software design layers.	CO8	L3
9	How do AJAX requests differ from normal requests in HTTP request-response loop?	CO8	L3
e	**Experiences**	-	-
1			
2			
3			
4			
5			

E2. CIA EXAM – 2

a. Model Question Paper - 2

Crs Code:	15CS71	Sem:	7	Marks:	30	Time:	75 minutes
Course:	Web Technology and Its Application						

-	-	**Note: Answer any 2 questions, each carry equal marks.**	**Marks**	**CO**	**Level**
1	a	Identify and briefly describe at least four different server-side development technologies.	8	CO7	L3
	b	Describe the difference between the multi-threaded and multi-process setup of PHP in Apache.	8	CO7	L3
2	a	How does PHP allow variable names to be specified at run-time? Explain with an example.	8	CO7	L3
	b	How are parameters passed by reference different than those passed by value?	8	CO7	L3
3	a	What is embedded JavaScript used? What is the disadvantages of using embedded JavaScript.	8	CO8	L3
	b	How does one access a particular HTML tag through JavaScript.?	8	CO8	L3

4	a	Name some common software design layers. Explain each layer.	8	CO8	L3
	b	How do AJAX requests differ from normal requests in HTTP request-response loop?	8	CO8	L3

b. Assignment – 2

Note: A distinct assignment to be assigned to each student.

Model Assignment Questions							
Crs Code:	CS501PC	Sem:	7	Marks:	5 / 10	Time:	90 – 120 minutes
Course:	Web Technology and Its Application						
Note: Each student to answer 2-3 assignments. Each assignment carries equal mark.							

SNo	USN	Assignment Description	Marks	CO	Level
1		How do AJAX requests differ from normal requests in HTTP request-response loop?	5	CO7	L3
2		What are software layers, and what benefit do they provide?	5	CO7	L3
3		What are some reasons a user might have JavaScript disabled.?		CO7	L3
4		What kind of variable typing is used in JavaScript ? What benefits and dangers arise from this?	5	CO7	L3
5		Why is embedded JavaScript used ?what is the disadvantage of using embedded Java scripts?	5	CO7	L3
6		Describe how to validate a form in HTML.	5	CO7	L3
7		How does PHP allow variable names to be specified at run-time? Explain with an example.	5	CO7	L3
8		How are parameters passed by reference different than those passed by value?	5	CO7	L3
9		Identify and briefly describe at least four different server-side development technologies.	5	CO7	L3
10		Describe the difference between the multi-threaded and multi-process setup of PHP in Apache.	5	CO8	L3
11		What is a static variable and how does it differ from a regular one?	5	CO8	L3
12		What are three access modifiers?	5	CO8	L3
13		Explain the role of an interface in object-oriented programming.	5	CO8	L3
14		Describe the concept of dynamic dispatching.	5	CO8	L3
15		What are the advantages of inheritance?	5	CO8	L3
16		What are the three error reporting flags? How are excepted errors different from warnings?	5	CO8	L3
17		What is the role of error reporting in PHP? How should it differ for development sites compared to production sites?	5	CO8	L3
18		What are the most common ways of reducing validation errors?	5	CO8	L3
19		Describe the different error_reporting Constants.	5	CO8	L3
20		What problem does spam bots cause.	5	CO8	L3

D3. TEACHING PLAN - 3

Module – 5

Title:	Managing State and Advanced	Appr Time:	16 Hrs
a	***Course Outcomes***	-	**Blooms**
-	The student should be able to:	-	**Level**
1	Report small memory management using cookies and URL in web	CO9	L2

	application		
2	Explain the concept of AJAX and Jquery for web services	CO10	L2
b	***Course Schedule***		
Class No	**Module Content Covered**	**CO**	**Level**
1	Managing State, The Problem of State in Web Applications	CO9	L2
2	Passing Information via Query Strings,	CO9	L2
3	Passing Information via the URL Path	CO9	L2
4	Cookies, Serialization	CO9	L2
5	Session State, HTML5 Web Storage	CO9	L2
6	Caching, Advanced JavaScript and jQuery	CO9	L2
7	JavaScript Pseudo-Classes, jQuery Foundations	CO10	L2
8	AJAX, Asynchronous FileTransmission, Animation	CO10	L2
9	Backbone MVC Frameworks, XML Processing and Web Services	CO10	L2
10	XML Processing, JSON, Overview of Web Services.	CO10	L2
c	**Application Areas**	**CO**	**Level**
1	Report small memory management using cookies and URL in web application.	CO10	L2
2	Explain the concept of AJAX and Jquery for web services.	CO9	L2
d	**Review Questions**	-	-
1	How can we pass information in HTTP?		L1
2	What are the different types of global web storage objects? What is their purpose?		L3
3	How can we pass information in HTTP?	CO9	L2
4	Describe the use of URL rewriting.	CO9	L4
5	What is the difference between session cookies and persistent cookies?	CO9	L2
6	Explain how does the browser know which type of cookie to create?	CO9	L5
7	Why are prototypes more efficient than other techniques for creating classes in JavaScript?	CO9	L2
8	How can an object be instantiated using the concepts of object literals?	CO10	L3
9	What does $() short stand for in jQuery?	CO10	L4
10	What is well-formedness and validity in the context of XML? How do they different?	CO10	L1
11	What are the in-memory and the event approaches to XML processing? How do they differ?	CO10	L4
e	**Experiences**	-	-
1		CO10	L2
2			
3			
4		CO9	L3
5			

E3. CIA EXAM – 3

a. Model Question Paper - 3

Crs Code:	CS501PC	Sem:	7	Marks:	30	Time:	75 minutes		
Course:	Web Technology and Its Application								
-	**-**	**Note: Answer any 2 questions, each carry equal marks.**					**Marks**	**CO**	**Level**
1	a	What are the different types of global web storage objects? What is their purpose?					16	CO9	L1

	b	Describe the use of URL rewriting.		CO9	L2
2	a	Explain how does the browser know which type of cookie to create?	16	CO10	L2
	b	Why are prototypes more efficient than other techniques for creating classes in JavaScript?		CO10	L2
3	a	What is well-formedness and validity in the context of XML? How do they different?	16	CO10	L2
	b	What are the in-memory and the event approaches to XML processing? How do they differ?		CO10	L2
4	a	Why are prototypes more efficient than other techniques for creating classes in JavaScript?	16	CO10	L2
	b	How can an object be instantiated using the concepts of object literals?	16	CO10	L2

b. Assignment – 3

Note: A distinct assignment to be assigned to each student.

Model Assignment Questions							
Crs Code:	CS501PC	Sem:	7	Marks:	5 / 10	Time:	90 – 120 minutes
Course:	Web Technology and Its Application						
Note: Each student to answer 2-3 assignments. Each assignment carries equal mark.							

SNo	USN	Assignment Description	Marks	CO	Level
1		What are the in-memory and event approaches to XML processing? How do they differ?	5	CO9	L2
2		Explain JSON in java script?	5	CO9	L2
3		What is the difference between the append() and appendTo() methods?	5	CO9	L2
4		What are twp techniques for AJAX file upload? Explain any one.	5	CO9	L2
5		What are the commonly used animations in jQuery?	5	CO9	L2
6		How would you change the text color of all the <a> tags in jQuery?	5	CO9	L2
7		Jquery extends the CSS syntax for selectors. Explain what that means.	5	CO10	L2
8		How are collections and views useful?	5	CO10	L2
9		Write a jquery selector to get all the <p> that contain the word “hello”.	5	CO10	L2
10		How can we use ensure jQuery loads, even if the CDN is down?	5	CO10	L2
11		What is cross-origin resource sharing(CORS)?Explain.	5	CO10	L2
12		Describe the two models for page caching.	5	CO10	L2
13		In PHP, how are sessions stored between requests?	5	CO10	L2
14		What is the difference between page output caching and application caching?	5	CO10	L2
15		Describe the best practices for using persistent cookies.	5	CO10	L2

F. EXAM PREPARATION

1. University Model Question Paper

Course:	Web Technology and Its Application					Month / Year	May /2018
Crs Code:	15CS71	Sem:	7	Marks:	80	Time:	180 minutes

-	Note	Answer all FIVE full questions. All questions carry equal marks.	Marks	CO	Level
1	a	Briefly explain why should one use XHTML over HTML	16	CO1	L3
	b	Explain the following tags with syntax and an example for each: i) <p> ii) <pre> iii) <sup> iv) <sub> v) <blockquote>		CO1	L3

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		OR			
-	a	Explain all selector forms.	16	CO2	L3
	b	How lists are handled in XHTML? Design an XHTML code for illustrating nested lists.		CO2	L3
2	a	What are the elements used to define the structure of an HTML table?	16	C03	L3
	b	Describe the purpose of a table caption and the table heading elements.		C03	L3
-	a	Describe how block-level elements are different from online elements.	16	CO4	L3
	b	Briefly describe the two ways to construct multi-column layouts in CSS.		CO4	L3
3	a	How is a browser plug-in different from normal requests in the HTTP request -response loop.	16	CO5	L3
	b	Why is embedded javascripts used? What is disadvantage of using embedded javascripts ?			L3
	c	What is use of function in javascript.?		CO5	L3
		OR			
-	a	Identify and briefly describe at least four different server-side development technologies.	16	CO6	L3
	b	What are server-side include files? Why are they important in PHP?		CO6	L3
4	a	Can Apache support the multi-thread mode? Why is thread advantageous?	16	CO7	L3
	b	How are parameters passed by reference different than those passed by values?		CO7	L3
		OR			
-	a	How does one access a particular HTML tag through JavaScript.?	16	CO8	L3
	b	Name some common software design layers.		CO8	L3
	c	How do AJAX requests differ from normal requests in HTTP request-response loop?		CO8	L3
5	a	Describe the use of URL rewriting.	16	CO9	L2
	b	What is the difference between session cookies and persistent cookies?		CO9	L2
	c	Explain how does the browser know which type of cookie to create?		CO9	L2
		OR			
	a	How can an object be instantiated using the concepts of object literals?	16	CO10	L2
	b	What does $() short stand for in jQuery?		CO10	L2
	c	What is well-formedness and validity in the context of XML? How do they different?		C010	L2

2. SEE Important Questions

Course:	Web Technology and Its Application					Month / Year	May /2018
Crs Code:	15CS71	Sem:	7	Marks:	80	Time:	180 minutes

	Note	Answer all FIVE full questions. All questions carry equal marks.	-	-	
Module	Qno.	Important Question	**Marks**	**CO**	**Year**
1	1	Explain HTTP. Explain the standard XHTML document structure.		CO1	2011
	2	Explain the XHTML tags used for lists in documents.		CO1	2012
	3	Explain all selector forms.		CO2	2017
	4	Explain all controls that are created with the <input> tag with examples, which are used for text collection.		CO2	2016
	5	Explain the difference between HTML and HTML.		CO1	2007

2	1	What are the elements used to define the structure of an HTML table?		CO3	
	2	What are the two different ways of passing information via the URL.?		CO3	
	3	What is difference between replaced inline elements and non replaced inline elements.		CO3	
	4	In CSS, what does floating an element do? How do you float an element?		CO4	
	5	Briefly describe the two ways to construct multi column layouts in CSS.		CO4	
3	1	Identify and briefly describe at least four different server-side development technologies.		CO5	
	2	Describe the difference between the multi-threaded and multi-process setup of PHP in Apache.		CO5	
	3	What are server side include files? Why are they important in PHP ?		CO5	
	4	How does PHP allow variable names to be specified at run-time? Explain with an example.		CO6	
	5	How are parameters passed by reference different than those passed by value?		CO6	
4	1	What is embedded JavaScript used? What is the disadvantages of using embedded JavaScript.	16	CO7	
	2	How does one access a particular HTML tag through JavaScript.?		CO7	
	3	Name some common software design layers. Explain each layer.		CO7	
	4	How do AJAX requests differ from normal requests in HTTP request-response loop?		CO8	
	5	How do AJAX requests differ from normal requests in HTTP request-response loop?		CO8	
5	1	What are the different types of global web storage objects? What is their purpose?	16	CO9	
	2	Describe the use of URL rewriting.		CO9	
	3	What is well-formedness and validity in the context of XML? How do they different?		CO9	
	4	Explain how does the browser know which type of cookie to create?		CO10	
	5	Why are prototypes more efficient than other techniques for creating classes in JavaScript?		CO10	